

EQUIPMENT REVIEW

dCS Debussy DAC

by Alan Taffel

In 2003, Bentley Motors shocked the automotive world by introducing the Continental GT. Until then, acquiring one of Bentley's bespoke motorcars would set the purchaser back several hundred thousand dollars. But the Continental GT cut in half the price of entry into those rarified ranks. Initial skepticism was short-lived; one look at the car's sumptuous interior and prospective buyers knew they were in the presence of a true Bentley. The GT became an instant success, neatly illustrating that value has appeal even at extravagant price points.

Now comes the Debussy DAC from dCS, the digital specialist whose products are every bit as top-shelf—and pricey—as those of its stable-mates. Prior to the Debussy's arrival, owning an 'entry-level' dCS DAC was an £10,000 to £13,500 proposition. The new model, which carries an £7,500 price tag, aims to be dCS' Continental GT.

Of course, while eleven grand may break new ground for dCS, it's still a lot of dough for a DAC. Still, no realistic consumer would expect dCS gear (or Bentleys) ever to be downright cheap. The real question is whether the Debussy measures up to dCS standards and, in so doing, confers true value to its buyers. To find out, we need to pop the hood.

There is a reason dCS products are expensive. While a Bentley is characterized by luxurious, hand-crafted materials, dCS gear is crammed full of costly DSP chips, hybrid power supplies, discrete clocks, and gate arrays. Custom software harnesses this powerful coterie to execute a complex digital dance that comprises multiple stages of synchronous upsampling, conversion to dCS' proprietary 5-bit format, and finally processing by the firm's lauded Ring DAC,

with a choice of in-house programmed filters on the side.

One might think a 'budget' dCS would employ fewer custom parts and more off-the-shelf hardware and software. But that approach would not result in a true dCS, any more than badge engineering a VW would yield a Bentley. Indeed, the more one examines the Debussy's innards, the more one comes away wondering how it can be sold at its price. Consider: The Debussy includes the exact same control board—responsible for everything from power delivery, I/O, upsampling, clocking, and format conversion—as the universally acclaimed Paganini and Scarlatti models. Its Ring DAC and fully balanced Class A output stage, both discrete modules, are identical to those in the Debussy's expensive siblings, as are the software-based digital filters.

Nor did dCS skimp on features. Again, one might reasonably expect a loss of connection flexibility, but the Debussy will handle an RCA, BNC, and a pair of AES sources. (As usual, the BNC input was the



best sounding.) Further, there are both single-ended and balanced outputs. Other welcome ingredients include a front-panel sample-rate display, the ability to accommodate an external word clock, and the world's heaviest remote control.

All this would be sufficient to justify excitement about the Debussy's debut, but dCS ups the value equation considerably with the inclusion of a USB port. An easy, inexpensive add-on, you say? Not in this case. Elsewhere in the dCS line, adding a USB interface requires an entirely separate (and dearly priced) box (the U-Clock). The Debussy is the company's first and only product to incorporate both the Ring DAC and USB in one box. Furthermore, this is no ordinary USB interface. It's good up to 96/24, and is of the asynchronous variety, which allows the DAC rather than the PC to control timing, resulting in far less jitter. This port is the icing on the Debussy cake.

So where, exactly, does the dCS newcomer cut corners? Mostly in areas that do not affect the sound. Much was saved, I am told, through the exclusion of an alphanumeric front-panel display. In its place are a series of LEDs that indicate input and filter selection, sampling rate, and volume when the Debussy is used as a linestage (more on this later). Personally, I found the LED array perfectly serviceable. Another limitation: The Debussy has only

two filter options, whereas higher models offer more. This is another non-issue as far as I'm concerned; I was perfectly content with the recently released apodising filter, which I found significantly more natural than the standard version. In any case, future filters that dCS deems superior will be downloadable. One final omission was upsampling to DSD—a feature that impressed me mightily at the 2010 CES. This particular exclusion did disappoint me, and I'm still lobbying dCS to find a way to include it in the Debussy. Call me greedy.

Ultimately, of course, a car is judged by a test drive and an audio component is judged by listening (unless you're Julian Hirsch). So, does the Debussy's advanced and costly componentry deliver the sonic goods? I won't mince words: The Debussy is flat out fabulous. Let me count the ways.

This is not the first DAC I have reviewed that employs an elaborate processing scheme. For the most part, I have been unhappy with such units. The behind-the-scenes frenzy of digital calculating seems to find its way into the listening experience. That is, such DACs sound like they're working hard, which prevents the listener from relaxing into the music. DCS knows of and is careful to avoid this phenomenon. The company uses more processors (oops, there goes the cost curve) so that each is taxed less. This explains, for example, why upsampling is performed in stages rather than all at once. Perhaps it also accounts for the fact that, despite all the binary manipulations taking place, the Debussy sounds unfailingly natural. Music winds out of this DAC like thread from a spool.

In virtually every way, the Debussy sounds terrific. Dynamics, depth, and detail are present in copious quantities. If the music so beckons, this DAC's tone is as ravishing as long, lustrous hair. Indeed, early in my time with the Debussy I identified a certain pervasive smoothness that was fine for some source material, but inconsistent with the more ragged elements of my CD collection (e.g. the MFSL remaster of the Pixies' wonderfully raw *Doolittle*). However, inserting some good cones underneath the



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Getting the Debussy's USB Right

No matter what anyone—or any manual—tells you, USB is not plug-and-play. Not if you want to get the best sound from this interface. Overcoming your PC operating system's inherent limitations is the first challenge. If you are running Windows XP and follow the Debussy manual's instructions, for instance, you will likely end up (knowingly or not) invoking Windows' Direct Sound, which means bits will pass through the dreaded kernel mixer. Following the manual to the letter, I achieved what I have come to view as typical USB sound: smeared rhythms, closed extension, and screechy strings. In short, yuck.

Regardless of your Windows OS, what you want to do is bypass all its junk by using the far superior, professional standard ASIO driver set. (Another option is the recent WASAPI, but I did not have time to experiment with it.) Most music-playing software packages, like Media Monkey, support ASIO. The problem is that the Debussy doesn't. However, a nifty, freely downloadable package called ASIO4ALL solves the problem. Not only are these drivers bit perfect, they dynamically adapt to the source material's sample rate. This is an important provision, because standard PC (and Mac) drivers asynchronously upsample data to the highest supported sample rate—a sonically injurious process. ASIO4ALL will work with virtually any playback software except iTunes. Once you've heard the way ASIO restores USB's air and dynamics, you will never go back.

After sorting out software, there is still the matter of cables. As I have stressed before, USB cables make a demonstrable difference. For my tests with the Debussy, I experimented with five of them, ranging from the Brand X variety that comes with printers to audiophile affairs from Synergistics and Kimber. The winner this round — just as in the last time I conducted a USB cable survey — was the unpretentious Belkin Gold Series. The difference this cable makes is not remotely subtle. Depending on what you are comparing it to, it can be the difference between music and wallpaper. Here, blessedly, in one area of the high end that does not require spending a fortune; you can pick up a 1.8m set at Amazon.co.uk for just £7.99.



► chassis completely extinguished this minor coloration. So I settled down to some serious listening.

'On the Beach at Night Alone,' from Ralph Vaughn Williams' choral Sea Symphony (Telarc) is an enthralling piece that whisks the listener on a journey from the solitude of one man's thoughts to the "vast similitude" of the cosmos. I listened to this piece through the Debussy feeling that it could hardly be more engrossing. The DAC's sheer quantity of spatial, dynamic, and musical information added up to an all-encompassing, emotionally shattering experience.

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By comparison, my Bryston BDA-1 reference DAC (a TAS Golden Ear recipient) seemed restrained. The chorus lacked high-end extension, sounding almost muted. Dynamics were still excellent, yet the Bryston could not achieve the cataclysmic climax delivered by the dCS. Bass was nowhere near as thunderous. Finally, the Bryston buried some instruments in the mix, whereas the Debussy would never subject any player to such ignominy. In this respect, having a Debussy is like buying a new analog front end; in both cases you get to discover previously buried treasure within familiar tracks.

On smaller scale works, like the Stravinsky Suite from *L'Histoire du Soldat* (Pentatone), the gap between the dCS and the Bryston narrowed. Neither held an advantage with respect to pacing, and orchestral timbres were virtually indistinguishable. Still, the Debussy delivers more detail — you can hear the hall reverb far more clearly right from the first note—and a deeper stage.

In addition, the Debussy not only unearths every musical line, it makes following all those lines concurrently an effortless task. ►

► Were it not for Linn Product's own well-charted delve into the waters of the next generation, I guess Ivor Tiefenbrun would be well pleased with this DAC.

I should reiterate here that the Bryston to which I compared the Debussy is an excellent DAC, and considerably cheaper too. The above contrasts are not intended to denigrate the BDA-1, but to convey just how good the Debussy is compared to "run of the mill" reference gear. This point hit home even harder when I played the SACD layer of the same Stravinsky disc through the estimable Marantz UD9004 universal player. In the past, even the best CD rigs have paled beside the Marantz's way with an SACD. Not this time. Here, it was the SACD, higher resolution notwithstanding, that sounded literally pale by comparison to the Debussy's Red Book presentation. That's how good the Debussy sounds—it can upend the normal CD/SACD pecking order.

One area where I find the Debussy ever so slightly wanting is rhythm. It's not that the DAC lacks a sense of pace—far from it. However, I have heard other digital pieces, such as the Burmester 089 CD player (tested by Chris Thomas on page 46) whose rhythms are more concrete. I doubt this deficit would even be noticeable without a direct comparison to the rare product that is superior in this category. As such, rhythm is not so much a Debussy weakness; rather, it simply is not among its lengthy list of strengths. I suspect the addition of the external Puccini clock—a nice down-the-road upgrade for Debussy owners—might improve things in this area.

That leaves me with one last strength and one real weakness to report. Let's get the bad news out of the way first. Although the Debussy is fully equipped to directly drive an amplifier, I found it quite unimpressive in this capacity. As a linestage, the dCS sounds rather boring, with compressed dynamics and undifferentiated timbres. Only its vocal purity, quiet background, and solid imaging elevate it above mid-fi. I tried the Debussy in this mode with two different amps, with the same results. So, although being able to use the Debussy as a linestage would up the value quotient even further, I must instead recommend using this DAC as a DAC, sending its analog outputs through a good dedicated linestage. In my experience, that is the only way to hear what the Debussy can really do.

And the last thing to report that this DAC does is deliver the best USB sound I have ever heard. Setup must be done with care (see sidebar), but the results can be extraordinary. This is the first USB I have listened to—and longtime readers know that I've heard and dismissed quite a few—that is truly in the same sonic territory as (if not quite the equal of) the best S/PDIF. Playing my trusty Dvorak Serenades (Praga), the Debussy's BNC input was just slightly less grainy and more dynamic than USB. Mary Guathier's "Falling Out of Love" from Mercy Now was again awfully close. In USB mode, Mary's voice moved forward and exhibited some sibilance plus, once more, a hint of grain.

With higher-resolution source material, the gap widened—in S/PDIF's favour. The Classic Records 96/24 recording of Ravel's Pavanne pour une infant defunte was clearly less timbrally pure when played via USB. Too, the Debussy's USB does not sidestep the lax rhythms I have noted in every other

USB DAC. On the other hand, strings, which are usually USB's *bête noire*, here had nary a trace of the shrillness that would normally afflict them. Overall, the Debussy's BNC input is its most convincing; however, the USB port is very nearly its musical and sonic equal—and that's saying a lot.

I have no idea if the dCS Debussy will meet with the same success Bentley's Continental GT has enjoyed. What I do know is that it delivers everything its builders intended in terms of performance, usability, and yes, value. Is it a 'true' dCS? You don't even need to look under the hood to find out. Just listen. +

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TECHNICAL SPECIFICATIONS

Inputs: Digital USB, RCA, AES/EBU (2), BNC

Outputs: Analog balanced XLR and single-ended RCA

Maximum Resolution: 192/24 (S/PDIF), 96/24 (USB)

Dimensions (WxHxD): 44.7x6.6x39.4cm

Weight: 0.64kg

Price: £7,500

ASSOCIATED EQUIPMENT

Goldmund Mimesis 36 digital transport
Bryston BDA-1 DAC

HP Latitude (Windows 7) PC

Marantz UCD-9004 Blu-ray Player

Goldmund Mimesis 22 Preamplifier

Goldmund Mimesis 8 Power Amplifier

Metaphor Acoustics 2 Speakers

Empirical Design cables

Goldmund cones

MANUFACTURED BY

Data Conversion Systems, Ltd.
Unit 1, Buckingham Business Park,
Anderson Road, Swavesey,
Cambridge,
CB24 4AE

URL: www.dcsltd.co.uk

Tel: +44(0)1954 233950

